ELSEVIER

Comput. Methods Appl. Mech. Engrg. 151 (1998) 619–622

Computer methods in applied mechanics and engineering

Author Index of Volume 151

Achdou, Y., Tallec, P.L., Valentin, F. and Pironneau, O. Constructing wall laws with Domain Decomposition or asymptotic expansion techniques 215–232
Akay, H.U., Ecer, A. and Fekete, K. A semi-explicit parallel solver for viscous incompressible flows 1– 12
Alduncin, G., Esquivel-Avila, J. and Reyes-Avila, L. Steady filtration problems with seawater intrusion: Variational analysis 13– 25
Almeida, A., Faria, L. and Febra, R. Refined two-dimensional models for the analysis of free boundary flows between parallel plates 163–180
Almeida, E.S. and Spilker, R.L. Finite element formulations for hyperelastic transversely isotropic biphasic soft tissues 513–538

Baker, A.J., Iannelli, J.S., Roy, S. and Chaffin, D.J. On some recent adventures into improved finite element CFD methods for convective transport 27– 42
Banerjee, P.K. and Honkala, K.A. Development of BEM for thermoviscous flow 43– 61
Batra, R.C. and Stevens, J.B. Adiabatic shear bands in axisymmetric impact and penetration problems 325–342
Benson, D.J. Eulerian finite element methods for the micromechanics of heterogeneous materials: Dynamic prioritization of material interfaces 343–360
Bhandari, D.R., Schwirian, R.E., Yu, C., Matarazzo, J.C. and Singleton, N.R. Study of the behavior of thermal shield support system for the French plants 277–286

Cecchi, M.M. and Salasnich, L. Shallow water theory and its application to the Venice lagoon 63– 74
Chaffin, D.J. see Baker, A.J. 27– 42
Chippada, S., Dawson, C.N., Martinez, M.L. and Wheeler, M.F. A Godunov-type finite volume method for the system of Shallow Water Equations 105–129
Chung, T.J. see Yoon, K.T. 75–104

Dawson, C.N. see Chippada, S. 105–129
de Souza Neto, E.A. see Owen, D.R.J. 479–495
Desai, C.S. and Zhang, W. Computational aspects of disturbed state constitutive models 361–376
Ding, Y. see Kawahara, M. 195–213
Dinis, P.B. see Martins, J.A.C. 419–433
du Toit, C.G. Finite element solution of the Navier–Stokes equations for incompressible flow using a segregated algorithm 131–141

Ecer, A. see Akay, H.U. 1– 12
Edwards, M.G. Cross flow tensors and finite volume approximation with by deferred correction 143–161

Esquivel-Avila, J. see Alduncin, G. 13– 25

Faria, L. see Almeida, A. 163–180
Febra, R. see Almeida, A. 163–180
Fekete, K. see Akay, H.U. 1– 12
Fonseca, J.S.O. see Kikuchi, N. 401–417

Garcia, S.A. see Yoon, K.T. 75–104
Ghosh, S. see Moorthy, S. 377–400
Glowinski, R., Pan, T.W. and Périaux, J. Distributed Lagrange multiplier methods for incompressible viscous flow around moving rigid bodies 181–194

Heard, G.W. see Yoon, K.T. 75–104
Hien, T.D. and Kleiber, M. On solving nonlinear transient heat transfer problems with random parameters 287–299
Honkala, K.A. see Banerjee, P.K. 43– 61

Iannelli, J.S. see Baker, A.J. 27– 42
Iordache, M.-M. and Willam, K. Localized failure analysis in elastoplastic Cosserat continua 559–586

Kalro, V. and Tezduyar, T. 3D computation of unsteady flow past a sphere with a parallel finite element method 267–276
Kawahara, M. and Ding, Y. Bifurcation analysis of brown tide in tidal flow using finite element method 195–213
Kikuchi, N., Nishiwaki, S., Fonseca, J.S.O. and Silva, E.C.N. Design optimization method for compliant mechanisms and material microstructure 401–417
Kleiber, M. see Hien, T.D. 287–299

Li, S., Mear, M.E. and Xiao, L. Symmetric weak-form integral equation method for three-dimensional fracture analysis 435–459
Loughran, J.G. see Owen, D.R.J. 479–495

Martinez, M.L. see Chippada, S. 105–129
Martins, J.A.C., Pires, E.B., Salvado, R. and Dinis, P.B. A numerical model of passive and active behavior of skeletal muscles 419–433
Matarazzo, J.C. see Bhandari, D.R. 277–286
Mear, M.E. see Li, S. 435–459
Monnier, J. and Trabucho, L. An existence and uniqueness result in bone remodeling theory 539–544
Moon, S.Y. see Yoon, K.T. 75–104
Moorthy, S. and Ghosh, S. A Voronoi cell finite element model for particle cracking in elastic–plastic composite materials 377–400

Needleman, A. see Noor, A.K. 461–478
Nishiwaki, S. see Kikuchi, N. 401–417
Noor, A.K., Needleman, A. and Peters, J.M. Sensitivity analysis for failure and damage in dynamically loaded tensile bars 461–478

Ohtake, K. Thermal analysis of the thermal protection system for the re-entry vehicle 301–310
Oñate, E. Derivation of stabilized equations for numerical solution of advective–diffusive transport and fluid flow problems 233–265

Owen, D.R.J., de Souza Neto, E.A., Zhao, S.Y., Perić, D. and Loughran, J.G. Finite element simulation of the rolling and extrusion of multi-phase materials. Application to the rolling of prepared sugar cane 479–495

Pan, T.W. see Glowinski, R. 181–194
Park, H.C. and Youn, S.-K. Finite element analysis and constitutive modelling of anisotropic nonlinear hyperelastic bodies with convected frames 605–618
Périaux, J. see Glowinski, R. 181–194
Perić, D. see Owen, D.R.J. 479–495
Peters, J.M. see Noor, A.K. 461–478
Pires, E.B. see Martins, J.A.C. 419–433
Pironneau, O. see Achdou, Y. 215–232

Reyes-Avila, L. see Alduncin, G. 13– 25
Roy, S. see Baker, A.J. 27– 42

Salasnich, L. see Cecchi, M.M. 63– 74
Salvado, R. see Martins, J.A.C. 419–433
Scherf, O. see Wriggers, P. 593–603
Schwirian, R.E. see Bhandari, D.R. 277–286
Shi, P. Simulation of impact involving an elastic rod 497–499
Shi, P. see Showalter, R.E. 501–511
Showalter, R.E. and Shi, P. Dynamic plasticity models 501–511
Silva, E.C.N. see Kikuchi, N. 401–417
Singleton, N.R. see Bhandari, D.R. 277–286
Smolinski, P. and Wu, Y.-S. Stability of explicit subcycling time integration with linear interpolation for first-order finite element semidiscretizations 311–324
Spilker, R.L. see Almeida, E.S. 513–538
Stevens, J.B. see Batra, R.C. 325–342

Tallec, P.L. see Achdou, Y. 215–232
Terriault, P. see Trochu, F. 545–558
Tezduyar, T. see Kalro, V. 267–276
Trabucho, L. see Monnier, J. 539–544
Trochu, F. and Terriault, P. Nonlinear modelling of hysteretic material laws by dual kriging and application 545–558

Valentin, F. see Achdou, Y. 215–232

Wheeler, M.F. see Chippada, S. 105–129
Willam, K. see Iordache, M.-M. 559–586
Wnuk, M.P. Constitutive modeling of damage accumulation and fracture in multiphase materials 587–591
Wriggers, P. and Scherf, O. Adaptive finite element techniques for frictional contact problems involving large elastic strains 593–603
Wu, Y.-S. see Smolinski, P. 311–324

Xiao, L. see Li, S. 435–459

Yoon, K.T., Moon, S.Y., Garcia, S.A., Heard, G.W. and Chung, T.J. Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows 75–104

Youn, S.-K. see Park, H.C. 605–618
Yu, C. see Bhandari, D.R. 277–286

Zhang, W. see Desai, C.S. 361–376
Zhao, S.Y. see Owen, D.R.J. 479–495

ELSEVIER

Comput. Methods Appl. Mech. Engrg. 151 (1998) 623–627

Computer methods in applied mechanics and engineering

Subject Index of Volume 151

Adaptive methods

Finite element simulation of the rolling and extrusion of multi-phase materials. Application to the rolling of prepared sugar cane, D.R.J. Owen, E.A. de Souza Neto, S.Y. Zhao, D. Perić and J.G. Loughran 479–495

Adaptive finite element techniques for frictional contact problems involving large elastic strains, P. Wriggers and O. Scherf 593–603

Boundary element methods

Development of BEM for thermoviscous flow, P.K. Banerjee and K.A. Honkala 43– 61

Dynamics

Simulation of impact involving an elastic rod, P. Shi 497–499

Dynamic plasticity models, R.E. Showalter and P. Shi 501–511

Finite element analysis and constitutive modelling of anisotropic nonlinear hyperelastic bodies with convected frames, H.C. Park and S.-K. Youn 605–618

Elasticity

Design optimization method for compliant mechanisms and material microstructure, N. Kikuchi, S. Nishiwaki, J.S.O. Fonseca and E.C.N. Silva 401–417

A numerical model of passive and active behavior of skeletal muscles, J.A.C. Martins, E.B. Pires, R. Salvado and P.B. Dinis 419–433

Simulation of impact involving an elastic rod, P. Shi 497–499

Finite element formulations for hyperelastic transversely isotropic biphasic soft tissues, E.S. Almeida and R.L. Spilker 513–538

An existence and uniqueness result in bone remodeling theory, J. Monnier and L. Trabucho 539–544

Adaptive finite element techniques for frictional contact problems involving large elastic strains, P. Wriggers and O. Scherf 593–603

Finite element analysis and constitutive modelling of anisotropic nonlinear hyperelastic bodies with convected frames, H.C. Park and S.-K. Youn 605–618

Finite difference methods

Sensitivity analysis for failure and damage in dynamically loaded tensile bars, A.K. Noor, A. Needleman and J.M. Peters 461–478

Finite element and matrix methods

A semi-explicit parallel solver for viscous incompressible flows, H.U. Akay, A. Ecer and K. Fekete 1– 12

Steady filtration problems with seawater intrusion: Variational analysis, G. Alduncin, J. Esquivel-Avila and L. Reyes-Avila 13– 25
On some recent adventures into improved finite element CFD methods for convective transport, A.J. Baker, J.S. Iannelli, S. Roy and D.J. Chaffin 27– 42
Shallow water theory and its application to the Venice lagoon, M.M. Cecchi and L. Salasnich 63– 74
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194
A Godunov-type finite volume method for the system of Shallow Water Equations, S. Chippada, C.N. Dawson, M.L. Martinez and M.F. Wheeler 105–129
Finite element solution of the Navier–Stokes equations for incompressible flow using a segregated algorithm, C.G. du Toit 131–141
Cross flow tensors and finite volume approximation with by deferred correction, M.G. Edwards 143–161
Refined two-dimensional models for the analysis of free boundary flows between parallel plates, A. Almeida, L. Faria and R. Febra 163–180
Distributed Lagrange multiplier methods for incompressible viscous flow around moving rigid bodies, R. Glowinski, T.W. Pan and J. Périaux 181–194
Bifurcation analysis of brown tide in tidal flow using finite element method, M. Kawahara and Y. Ding 195–213
Constructing wall laws with Domain Decomposition or asymptotic expansion techniques, Y. Achdou, P.Le. Tallec, F. Valentin and O. Pironneau 215–232
Derivation of stabilized equations for numerical solution of advective–diffusive transport and fluid flow problems, E. Oñate 233–265
3D computation of unsteady flow past a sphere with a parallel finite element method, V. Kalro and T. Tezduyar 267–276
Study of the behavior of thermal shield support system for the French plants, D.R. Bhandari, R.E. Schwirian, C. Yu, J.C. Matarazzo and N.R. Singleton 277–286
On solving nonlinear transient heat transfer problems with random parameters, T.D. Hien and M. Kleiber 287–299
Thermal analysis of the thermal protection system for the re-entry vehicle, K. Ohtake 301–310
Stability of explicit subcycling time integration with linear interpolation for first-order finite element semidiscretizations, P. Smolinski and Y.-S. Wu 311–324
Adiabatic shear bands in axisymmetric impact and penetration problems, R.C. Batra and J.B. Stevens 325–342
Eulerian finite element methods for the micromechanics of heterogeneous materials: Dynamic prioritization of material interfaces, D.J. Benson 343–360
A Voronoi cell finite element model for particle cracking in elastic–plastic composite materials, S. Moorthy and S. Ghosh 377–400
A numerical model of passive and active behavior of skeletal muscles, J.A.C. Martins, E.B. Pires, R. Salvado and P.B. Dinis 419–433
Sensitivity analysis for failure and damage in dynamically loaded tensile bars, A.K. Noor, A. Needleman and J.M. Peters 461–478
Finite element simulation of the rolling and extrusion of multi-phase materials. Application to the rolling of prepared sugar cane, D.R.J. Owen, E.A. de Souza Neto, S.Y. Zhao, D. Perić and J.G. Loughran 479–495
Finite element formulations for hyperelastic transversely isotropic biphasic soft tissues, E.S. Almeida and R.L. Spilker 513–538
Adaptive finite element techniques for frictional contact problems involving large elastic strains, P. Wriggers and O. Scherf 593–603

Fluid mechanics
Steady filtration problems with seawater intrusion: Variational analysis, G. Alduncin, J. Esquivel-Avila and L. Reyes-Avila 13– 25
On some recent adventures into improved finite element CFD methods for convective transport, A.J. Baker, J.S. Iannelli, S. Roy and D.J. Chaffin 27– 42
Development of BEM for thermoviscous flow, P.K. Banerjee and K.A. Honkala 43– 61
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194
A Godunov-type finite volume method for the system of Shallow Water Equations, S. Chippada, C.N. Dawson, M.L. Martinez and M.F. Wheeler 105–129
Derivation of stabilized equations for numerical solution of advective–diffusive transport and fluid flow problems, E. Oñate 233–265

Fracture mechanics
Computational aspects of disturbed state constitutive models, C.S. Desai and W. Zhang 361–376
A Voronoi cell finite element model for particle cracking in elastic–plastic composite materials, S. Moorthy and S. Ghosh 377–400
Symmetric weak-form integral equation method for three-dimensional fracture analysis, S. Li, M.E. Mear and L. Xiao 435–459
Sensitivity analysis for failure and damage in dynamically loaded tensile bars, A.K. Noor, A. Needleman and J.M. Peters 461–478
Localized failure analysis in elastoplastic Cosserat continua, M.-M. Iordache and K. Willam 559–586
Constitutive modeling of damage accumulation and fracture in multiphase materials, M.P. Wnuk 587–591

Gas dynamics
On some recent adventures into improved finite element CFD methods for convective transport, A.J. Baker, J.S. Iannelli, S. Roy and D.J. Chaffin 27– 42
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194
Constructing wall laws with Domain Decomposition or asymptotic expansion techniques, Y. Achdou, P.Le. Tallec, F. Valentin and O. Pironneau 215–232

Incompressible and near incompressible media
A semi-explicit parallel solver for viscous incompressible flows, H.U. Akay, A. Ecer and K. Fekete 1– 12
Shallow water theory and its application to the Venice lagoon, M.M. Cecchi and L. Salasnich 63– 74
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194
Finite element solution of the Navier–Stokes equations for incompressible flow using a segregated algorithm, C.G. du Toit 131–141
Refined two-dimensional models for the analysis of free boundary flows between parallel plates, A. Almeida, L. Faria and R. Febra 163–180
Distributed Lagrange multiplier methods for incompressible viscous flow around moving rigid bodies, R. Glowinski, T.W. Pan and J. Périaux 181–194
3D computation of unsteady flow past a sphere with a parallel finite element method, V. Kalro and T. Tezduyar 267–276

Nonlinear mechanics
Eulerian finite element methods for the micromechanics of heterogeneous materials: Dynamic prioritization of material interfaces, D.J. Benson 343–360
Computational aspects of disturbed state constitutive models, C.S. Desai and W. Zhang 361–376
Nonlinear modelling of hysteretic material laws by dual kriging and application, F. Trochu and P. Terriault 545–558

Numerical solution procedures
Sensitivity analysis for failure and damage in dynamically loaded tensile bars, A.K. Noor, A. Needleman and J.M. Peters 461–478
Finite element analysis and constitutive modelling of anisotropic nonlinear hyperelastic bodies with convected frames, H.C. Park and S.-K. Youn 605–618

Optimization
Design optimization method for compliant mechanisms and material microstructure, N. Kikuchi, S. Nishiwaki, J.S.O. Fonseca and E.C.N. Silva 401–417

Optimization and design of structures
Design optimization method for compliant mechanisms and material microstructure, N. Kikuchi, S. Nishiwaki, J.S.O. Fonseca and E.C.N. Silva 401–417

Plasticity
Adiabatic shear bands in axisymmetric impact and penetration problems, R.C. Batra and J.B. Stevens 325–342
Computational aspects of disturbed state constitutive models, C.S. Desai and W. Zhang 361–376
A Voronoi cell finite element model for particle cracking in elastic–plastic composite materials, S. Moorthy and S. Ghosh 377–400
Dynamic plasticity models, R.E. Showalter and P. Shi 501–511
Nonlinear modelling of hysteretic material laws by dual kriging and application, F. Trochu and P. Terriault 545–558
Localized failure analysis in elastoplastic Cosserat continua, M.-M. Iordache and K. Willam 559–586

Solutions of ordinary and partial differential equations
A Godunov-type finite volume method for the system of Shallow Water Equations, S. Chippada, C.N. Dawson, M.L. Martinez and M.F. Wheeler 105–129
Derivation of stabilized equations for numerical solution of advective–diffusive transport and fluid flow problems, E. Oñate 233–265
Stability of explicit subcycling time integration with linear interpolation for first-order finite element semidiscretizations, P. Smolinski and Y.-S. Wu 311–324
An existence and uniqueness result in bone remodeling theory, J. Monnier and L. Trabucho 539–544

Stability in fluid mechanics
Bifurcation analysis of brown tide in tidal flow using finite element method, M. Kawahara and Y. Ding 195–213

Stochastic processes
On solving nonlinear transient heat transfer problems with random parameters, T.D. Hien and M. Kleiber 287–299

Subsonic flow
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194

Supersonic flow
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194
Constructing wall laws with Domain Decomposition or asymptotic expansion techniques, Y. Achdou, P.Le. Tallec, F. Valentin and O. Pironneau 215–232
Thermal analysis of the thermal protection system for the re-entry vehicle, K. Ohtake 301–310

Thermal effects and thermodynamics
Development of BEM for thermoviscous flow, P.K. Banerjee and K.A. Honkala 43– 61
Constructing wall laws with Domain Decomposition or asymptotic expansion techniques, Y. Achdou, P.Le. Tallec, F. Valentin and O. Pironneau 215–232
Study of the behavior of thermal shield support system for the French plants, D.R. Bhandari, R.E. Schwirian, C. Yu, J.C. Matarazzo and N.R. Singleton 277–286
On solving nonlinear transient heat transfer problems with random parameters, T.D. Hien and M. Kleiber 287–299
Thermal analysis of the thermal protection system for the re-entry vehicle, K. Ohtake 301–310
Adiabatic shear bands in axisymmetric impact and penetration problems, R.C. Batra and J.B. Stevens 325–342

Transonic flow
Flowfield-dependent mixed explicit–implicit (FDMEI) methods for high and low speed and compressible and incompressible flows, K.T. Yoon, S.Y. Moon, S.A. Garcia, G.W. Heard and T.J. Chung 75–194

Transport phenomena
Cross flow tensors and finite volume approximation with by deferred correction, M.G. Edwards 143–161
Derivation of stabilized equations for numerical solution of advective–diffusive transport and fluid flow problems, E. Oñate 233–265

Viscoelastic and viscoplastic media
Adiabatic shear bands in axisymmetric impact and penetration problems, R.C. Batra and J.B. Stevens 325–342

Viscous flow
A semi-explicit parallel solver for viscous incompressible flows, H.U. Akay, A. Ecer and K. Fekete 1– 12
Development of BEM for thermoviscous flow, P.K. Banerjee and K.A. Honkala 43– 61
Finite element solution of the Navier–Stokes equations for incompressible flow using a segregated algorithm, C.G. du Toit 131–141
Refined two-dimensional models for the analysis of free boundary flows between parallel plates, A. Almeida, L. Faria and R. Febra 163–180

Wave motion
Simulation of impact involving an elastic rod, P. Shi 497–499